REMARKS/ARGUMENTS

Claims 30, 31 and 57 are currently amended in order to improve their clarity. It is intended and believed that these amendments do not alter the scopes of these claims.

The rejections in the Office action are traversed in the following.

A. CLAIM 30 IS A PROPER INDEPENDENT CLAIM

The Examiner objected to claim 30 under 37 C.F.R. § 1.75(c) as being in improper dependent form. The Applicants respectfully submit that this claim as filed was not a dependent claim. Rather, it was an independent claim reciting a program product including a computer readable media having data for causing a computer to perform a method described by incorporation from claim 15. However, to obviate any misunderstanding, this claim has been amended to incorporate the method described in claim 15.

Accordingly, it is requested that the instant rejection be withdrawn.

B. CLAIMS 30-44 AND 57 ARE DIRECTED TO STATUTORY SUBJECT MATTER

The Examiner rejected, first, independent claim 31 and its dependent claims 32-44 and 57, and second, also independent claim 30, under 35 U.S.C. § 101 as directed to non-statutory subject matter.

These rejections are traversed because subject matter claimed as processes is as broadly patentable as the other categories of patentable subject matter, namely machines, manufactures, and compositions of matter. It has been established that, to be patentable, all that is required is that subject matter claimed as any one of the four statutory categories be directed to the "useful, concrete, and tangible". Thus, <u>process claims must be treated for subject matter patentability just like, for example, machine claims</u>. Specifically, there are no exceptions or requirements specifically limiting process patentability, such as an exception for "business methods" or a requirement of being in the "technological arts". In detail, the applicable legal standards are as follows.

1. THE APPLICABLE LEGAL STANDARDS

35 U.S.C. § 101 requires only that patentable processes, like patentable machines, manufactures, and compositions, be "useful".

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.[1]

It has long been established that, according to this broad statute, the only categories of subject matter excluded from patentability (or "non-statutory") are "laws of nature", "natural phenomena", and "abstract ideas".[2] The Federal Circuit has recast these exclusions into a positive test: manufactures, machines, compositions, and especially processes, directed to "useful, concrete, and tangible" results are patentable and not excluded (and are "statutory" subject matter).[3] Prior tests for statutory subject matter, such as the *Freeman-Walter-Abele* test, have been replaced to the extent they conflict with the "useful, concrete, and tangible" test (or with other Supreme Court precedent).[4]

For example, in *State Street,* the Federal Circuit applied the "useful, concrete, and tangible" test to find that the "transformation of data, representing discrete dollar amounts, by a machine" is patentable subject matter.[5] Such a transformation was found patentable because it was "useful", and "concrete", and "tangible". *State Street* does not stand for the converse: namely that to be "useful, concrete, and tangible" a process must be performed by a machine.

Indeed, *State Street* clarified that "useful, concrete, and tangible" results are not limited to physical transformations in the "technological arts". For example, it definitely put the "ill-conceived" business method exception finally to rest.[6]

> Claims should not be categorized as methods of doing business. Instead such claims should be treated like any other process claims. We agree that this is precisely the manner in which this type of claim should be treated. Whether the claims are directed to subject matter within § 101 should not turn on whether the claimed subject matter does "business" instead of something else.[7]

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1 35 U.S.C. § 101 (emphasis added).

2 *Diamond v. Diehr*, 450 U.S. 175, 185 (1981).

3 *In re Alappat*, 33 F.3d 1526, 1544 (Fed. Cir. 1994).

4 *State Street Bank & Trust Co. v Signature Financial Group, Inc.*, 149 F.3d 1368, 1374 (Fed. Cir. 1998).

5 *Id.* at 1373.

6 *State Street* at 1375.

7 *Id.* at 1377 (citing M.P.E.P. § 2106(I)) (emphasis added).

Methods of doing business are thus to be considered equally "useful, concrete, and tangible", and thus patentable, as methods of, for example, making steel. All process claims, whatever their subject, must be considered against a single standard of patentable subject matter.

It has also been established and emphasized that process claims must be treated for subject matter patentability just like claims to the other categories of patentable subject matter, such as machine clams. It is not relevant whether the claimed invention is a "series of steps" or is a "series of steps to be performed by a computer". Patentable subject matter according to § 101 does not depend on claim form.

> The question of whether a claim encompasses statutory subject matter should not focus on *which* of the four categories of subject matter a claim is directed to --process, machine, manufacture, or composition of matter--but rather on the essential characteristics of the subject matter, in particular, its practical utility.[8]

This was restated in a following decision.

> Whether stated implicitly or explicitly, we consider the scope of § 101 to be the same regardless of the form--machine or process--in which a particular claim is drafted.[9]

All types of claims recite patentable subject matter as long as they are directed to "useful, concrete, and tangible" results. Whether process claims may be interpreted to "encompass any product of the class configured in any manner to perform the underlying method" is not of concern to the patentable-subject-matter inquiry.[10]

2. <u>CLAIM 31 IS DIRECTED TO "USEFUL, CONCRETE, AND TANGIBLE" RESULTS</u>

With respect to the first subject matter rejections, the Office action states that "claims 31-44 and 57 are analyzed based upon the underlying process, and are thus rejected as being directed to a non-statutory process", because for example, the claimed series of steps is not "performed by a computer".

However, the Applicants submit that claim 31 is patentable because it is directed to "useful, concrete, and tangible" methods for providing loans to a participant from the

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8 *Id.* at 1375.

9 *AT&T Corp. v. Excel Comm., Inc.*, 172 F.3d 1352, 1357 (Fed. Cir. 1999).

10 *State Street* at 1372. This may, of course, be of concern for inquiries under §§ 102, 103, and 112.

participant's benefit-plan assets, specifically including the steps of establishing a loan fund, transferring funds-to the load fund, providing funds from the loan fund to settle redemptions, and accepting funds to repay redemptions.

The subject matter of this claims certainly has real-world utility. It recites a method for providing credit for purchases and other commercial transactions, and such credit is often of considerable usefulness.

This subject matter is also concrete. For example, most steps require the transfer of actual funds. In fact, this subject matter may be considered more concrete than the subject matter at issue in *State Street*, which merely involved manipulating computer-representations of share prices.

Finally, this subject matter achieves tangible results. Because, the participant is provided with additional funds, additional tangible goods and services may be obtained that would otherwise be unobtainable.

Furthermore, the subject matter is claim 31 is not a "law of nature", a "natural phenomenon", or an "abstract idea". Clearly, this claim is not a "law of nature", or a "natural phenomenon". It is also not an "abstract idea", which is an idea considered apart from concrete existence, and not applied or practical. The paradigm of an "abstract idea" is a mathematical principal or a mathematical process manipulating only pure numbers. Dealing with actual funds - "transferring" funds, "providing" funds, and "accepting" funds – is certainly practical and of concrete concern to the holders of the funds. Such dealing is not a "mathematical" concept or process. Finally, claim 31 is not unpatentable as a method of doing business. Such methods have now been established as not *per se* unpatentable.

In conclusion, because claim 31's subject matter is "useful, concrete, and tangible" and not otherwise excluded from patentability, it is patentable under 35 U.S.C. § 101. No more is required. Accordingly, it is requested that the rejections of claims 31-44 and 57 be withdrawn.

3. CLAIM 30 IS DIRECTED TO "USEFUL, CONCRETE, AND TANGIBLE" RESULTS

With respect to the second subject matter rejection, claim 30 recites a computer-readable medium encoded with program data structures. Such a computer-readable medium is patentable subject matter as the M.P.E.P. indicates and as the Examiner admits.[11]

Accordingly, it is requested that the rejection of claim 30 be withdrawn.

C. CLAIM 43 IS NOT INDEFINITE UNDER 35 U.S.C. § 112, SECOND PARAGRAPH

The Examiner rejected claim 43 as indefinite under 35 U.S.C. § 112, second paragraph, because "[u]se of statute, regulations or policy in the claim makes the claim vague indefinite since statute, regulations or policy is subject to change in the future".

The Applicants respectfully submit that an application must be examined for compliance with § 112 only at the time of filing.

> As above indicated, subsequently developed and therefore irrelevant formulae cannot be used to render non-enabling or indefinite that which was enabling and definite at the time the application was filed.[12]

If a claim is definitely understood by those of skill in the art at the time of filing, it is definite under § 112, second paragraph. Subsequent changes in the meanings of the claim terms do not render the claim indefinite.

Claim 43 clearly recites "statute, regulation, or policy", namely one or more of the provisions of 26 U.S.C. §§ 1 and 401 *et seq.*, and 29 U.S.C. § 1001 *et seq.* These "statutes, regulations, or policies" were all definitely determined and ascertainable at the time of filing. Claim 43 is therefore is definite, and subsequent changes that may occur in "statute, regulation, or policy" cannot make this claim indefinite.

Accordingly, it is requested that the rejection of claim 43 be withdrawn.

D. CLAIMS 1-57 ARE NOT OBVIOUS UNDER 35 U.S.C. § 103

The Examiner has rejected independent claims 1, 15, 31, and 45 as unpatentable under 35 U.S.C. § 103(a) over U.S. patent no. 5,206,803 by Vitagliano et al. (hereafter

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11 See, *e.g.*, M.P.E.P. § 2106(IV)(B)(1)(a).

12 *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1557 (Fed. Cir. 1983) *cert. denied*, 469 U.S. 851 (1984) (emphasis added).

"Vitagliano") in view of U.S. patent no. 5,884,285 by Atkins (hereafter "Atkins") and U.S. patent no. 6,105,007 by Norris (hereafter "Norris").

1. THE APPLICABLE LEGAL STANDARDS

A determination of *prima facie* obviousness requires that three factors be established by a preponderance of objective and specific evidence found in the prior art. The Office states these factors as follows:

> [1] first, . . . some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings; [2] second, . . . a reasonable expectation of success; [and 3] the prior art reference (or references when combined) must teach or suggest all the claim limitations.[13]

This requirement directly follows from Federal Circuit interpretations of controlling Supreme Court precedent.[14]

Equally important, evidence alleged to establish these three factors must be objectively and specifically found in the prior art, and not in an applicant's own disclosure.

> The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure.[15]

When reviewing Office actions on appeal, the Federal Circuit has repeatedly emphasized that objective and factual evidence is required in order to rigorously avoid such improper hindsight

> "The factual inquiry whether to combine references must be thorough and searching." It must be based on objective evidence of record. This precedent has been reinforced in myriad decisions, and cannot be dispensed with. . . . The need for specificity pervades this authority.[16]

Accordingly, it is incumbent on the Examiner to point to objective and specific factual support for the teachings or suggestions alleged to establish each of the three elements of

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13 M.P.E.P. § 2142 (emphasis added).

14 *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966) (Office policy is to follow *Graham v. John Deere Co.*); and *In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991) (cited in M.P.E.P. § 2142).

15 M.P.E.P. § 2142 (emphasis added) (citing *In re Vaeck* at 493).

16 *In re Sang-Su Lee*, 277 F.3d. 1338, 1342-1343 (Fed. Cir. 2002).

prima facie obviousness, and especially for any understanding or knowledge alleged to be generally possessed by one of ordinary skill in the art.

2. THE PRIOR ART FAILS TO TEACH OR SUGGEST A "LOAN FUND" AND ITS USES AS RECITED IN THE CLAIMS

The Examiner contends that Vitagliano discloses all elements of independent claims 1, 15, 31, and 45. The Applicants traverse this contention. Vitagliano does not, in fact, disclose or teach any elements of these independent claims because this reference does not disclose or teach a "*loan fund*" which is integral to the recited computer systems and methods.

Independent claim 1 is typical of all the independent claims, and recites (with emphasis added) a computer system with a program that performs the following steps:[17]

> initializing loan-fund information stored in a computer database upon establishment of a loan fund for the participant, the information initialized with data representing the value of funds derived from the participant's benefit-plan assets and transferred from the benefit plan upon establishment of the loan fund, wherein the loan fund is managed by an investment manager and is recorded in the benefit-plan as an asset of the participant;
>
> generating data representing requests to the investment manager to: (i) transfer funds from the loan fund to settle redemptions made by the participant, the participant making redemptions from the loan fund by use of at least one access vehicle; or (ii) accept funds into the loan fund from the participant in repayment of redemptions; and
>
> updating the stored loan-fund information with data representing fund transfers from and acceptances into the loan fund, whereby redemptions from and repayments to the participant's loan fund occur without access to the participant's benefit-plan assets.

A *loan fund* is integral to these steps, which require, *inter alia*, (i) establishment of a *loan fund* for the participant . . . [with] funds . . . transferred from the benefit plan; (ii) transfer [of] funds from the *loan fund* to settle redemptions; (iii) [acceptance of] funds into the *loan fund* from the participant repayments; and (iv) updating the stored *loan fund* information. Clearly, in order to disclose these steps, a reference must teach or suggest such a *loan fund*.

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17 Independent claims 15 and 45 recite similar computer methods and systems, respectively. Independent claim 31 recites a method in which the "establishing" and "transferring" steps perform functions similar to the above "initializing" step; the "providing" and "accepting" steps perform functions similar to the above "generating" step; both "updating" steps perform similar functions.

More specifically, as explained in the specification, a participant's *loan fund* is an account entirely separate and distinct from the participants benefit-plan (such as a retirement-plan) account. Fig. 1 illustrates a plurality of participants (1), each owning a benefit plan account (3) and a *loan fund* account (5) that is separate from the benefit plan accounts.[18] Functionally, the *loan fund* acts to buffer the participant's benefit-plan account from the participants credit transactions (such as purchases of goods or services) and redemptions. Fig. 2A and especially Fig. 2B illustrate this buffering. Structurally, Fig. 2A illustrates that the stored *loan fund* information (22) and *loan fund* assets (24) stand between the benefit plan (11, 12, 13, and 14) and associated credit/redemption and repayment systems (23, 25, 28, and 30-37). And functionally, Fig. 2B illustrates that funds are transferred 40 between a participant's benefit plan and *loan fund* only when the participant makes a decision to invest in the *loan fund*. However, funds are transferred (41) between a participant's *loan fund* and the associated credit-redemption/repayment systems whenever the participant requires a credit, makes a redemption, or repays prior credits or redemptions.

As illustrated, funds are never transferred directly from a participant's benefit plan to credit/redemption systems in order to finance credits or redemptions; and repayments of credits or loans are never transferred directly from repayment systems to the benefit plan. Both transfers are only to or from the loan fund; no such transfers are ever made directly to or from the benefit plan.

This structure is reflected in the invention's methods illustrated in Figs. 3A-B and 4A-C. The settlement process, illustrated in Fig. 3B, transfers funds (63) only from the *loan fund*, not from the benefit plan, for paying participant's credits and redemptions includes. Participant repayments of credits and redemptions, illustrated in Fig. 3A, also transfers payments (58) only to the *loan fund*, and not to the benefit plan. The only transfer involving the benefit plan occur when a participant invests in a loan fund. Figs. 4A-C illustrates the *loan fund* establishment process, which concludes with funds transfer 106 (Fig. 4C) from the benefit plan only to the loan fund, and not to credit/redemption systems. Clearly these

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18 A participant's loan fund is recorded in that participant's benefit plan as a single investment. See the specification at, *e.g.*, page 17 line 36 to page 18 line 3.

methods require that a *loan fund* be an account entirely separate from a benefit plan; thus a benefit plan cannot be considered as a *loan fund* of this invention[19]

THE VITAGLIANO REFERENCE

Vitagliano does not teach such a *loan fund*, and thus discloses none of the structures nor any of the methods of this invention, all of which recited in the independent claims. This is conclusively established by the following description from Vitagliano's specification.

> In this way, purchases are made by check or credit card with the ensuing purchased amount first sent to credit processing, block 70, to ensure that the amount is consistent with the available line of credit then pending; if so, the purchase is approved and <u>the purchase price withdrawn from the pension plan as an investment</u> (WDL). <u>This investment by the pension plan is a loan to the plan participant</u> at the then prevailing interest rate. In this manner, the Available Capital for that account in the plan is now reduced by the WDL amount, and <u>the plan participant is responsible to repay the WDL back to the pension plan with interest.</u>[20]

<u>In Vitagliano's system, each credit purchase or check redemption results in a separate withdrawal directly from the participant's pension plan. Each credit purchase or check redemption is considered as a separate loan by the participant's pension plan. And the participant is responsible for repaying these loans directly back to the pension plan.</u>

<u>The present invention is entirely different. In the claimed invention, a participant's benefit plan makes a single loan to the participant's loan fund. It is then only the participant's loan fund - not the participant's benefit plan - that handles the participant's numerous (in most cases) credits, redemptions, and repayments loan fund.</u>

Vitagliano's Fig. 1 illustrates this method of operation. Purchases and checks are financed by a withdrawal (WDL) directly from a pension plan (10) to the credit processing systems (70). Loan repayments (and other contributions) (30) also flow from the participant (110) directly to the pension plan (10). Vitagliano neither describes nor illustrates a *loan fund,* which, according to this invention, buffers the pension plan systems (10) from the credit processing systems (70). If such a *loan fund* were taught, it would necessarily be illustrated

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19 Further details may be found throughout the specification. For example, see the specification at, *e.g.*, page 5 line 29 to page 6 line 12; page 13 lines 18-31; page 14 lines 8-15; page 15 line 30 to page 16 line 5; and page 17 line 36 to page 18 line 8.

20 Vitagliano at col. 3 lines 35-47 (emphasis added).

as the sole source of all withdrawals (WDL) and the sole target of all repayments (30). Vitagliano does not illustrate such an account. Diligent examination of the Examiner's citations to Vitagliano reveal no teachings or suggestions to the contrary.

Stated more generally, in Vitagliano, each credit purchase or check redemption is a separate loan from the pension plan to the participant that is separately processed. In Vitagliano's invention, the benefit plan systems are directly exposed to each and every one of the participants' often daily transactions. In contrast, in the present invention the participant's benefit plan invests once in the participant's loan fund. Credits, redemptions, and repayments are the from or to the loan fund, not the benefit plan. Thus the present invention buffers the benefit plan systems from all of the participants' transactions.

THE ATKINS AND NORRIS REFERENCES

Neither Atkins nor Norris disclose, teach, or suggest a participant *loan fund* that receives an investment from the participant's benefit plan and that then provides credit for the participant.

Norris discloses only a kiosk equipped with a computer and software for accepting and processing a consumer loan application. If the application is approved, the kiosk can further handle necessary regulatory requirements, transfer the loan proceeds to the consumer, and arrange for automatic loan repayment.[21] These kiosk-provided loans are not related in any way to benefit plans of any sort. (The terms "pension plan" or "benefit plan" never appear in the Norris reference.)

Atkins discloses a consumer credit account (a "HOPE account") fully collateralized by assets of the consumer, including a residence (a "HOPE mortgage") and perhaps by other of the consumer's assets or accounts.[22] The credit account has at most a security interest in the collateral assets, and does not assume custody or ownership of the assets.[23] In other words, none of these collateral assets are invested in the credit account in order to provide consumer credits. Thus, Atkins' HOPE account is not a *loan fund* of the present invention.

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21 Norris, col. 2 lines 53-67.

22 Atkins, col. 4 lines 5-17; col. 7 lines 29-35; and col. 10 lines 53-65.

23 Atkins, col. 10 line 66 to col. 11 line 8.

Neither Norris nor Atkins, alone or in combination with Vitagliano, disclose or suggest a *loan fund* into which certain of the participant's benefit plan funds are invested and which in turn provides credit to the participant.

SUMMARY

In summary, the Applicants submit that the combination of Vitagliano with Norris and Atkins does not disclose or suggest, *inter alia*, a "*loan fund*" which is recited in and integral to most elements of all the independent claims. Accordingly, this combination does not establish a *prima facie* case of obviousness of independent claims 1, 15, 31, and 45.

3. THE DEPENDENT CLAIMS

The dependent claims incorporate all the elements of their parent independent claims. Also, dependent claims 2, 4, 8, 17, 19, 20, 24, 30, 32, 36, 37, 39, 44, 47, 48, 53, 54, 55, and 57 explicitly recite a "*loan fund*". Because the references relied on do not suggest a "*loan fund*", they do not establish a *prima facie* case of obviousness of either the independent or of the dependent claims.

4. SUMMARY

In summary, the Applicants submit that the Examiner has not met the burden of establishing with objective and specific prior-art evidence that the combination of Vitagliano with Norris and Atkins discloses or suggests, *inter alia*, a "*loan fund*" such as is recited in and integral to most elements of all the independent claims. Moreover, it is submitted that teachings or suggestions of such a "*loan fund*" cannot be found anywhere in these references.

And in the absence of any teaching of this integral element, the cited combination cannot establish the other two elements of a *prima facie* case of obviousness, namely (1) some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine reference teachings in order to achieve a *loan fund*, and (2) a reasonable expectation of success therein.

Accordingly, this combination does not establish a *prima facie* case of obviousness of claims 1-57, and therefore, Applicants respectfully request that the Examiner withdraw the instant rejections and allow the independent claims.

CONCLUSION

The Applicants respectfully request entry of the foregoing amendments and remarks into the file of the above-captioned application. The Applicants believe that each ground for rejection or objection has been successfully overcome or obviated and that all the pending claims are in condition for allowance. They earnestly request reconsideration and withdrawal of the Examiner's objection and rejections and allowance of the application.

If any issues remain, the Applicants invite the Examiner to telephone the undersigned to discuss the same and to arrange for prompt and efficient handling of the above-captioned application.

Respectfully submitted,

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